

<b>Sanmina-SCI Corporation</b>	)	<b>Departmental</b>
<b>Cumberland County</b>	)	<b>Findings of Fact and Order</b>
<b>Westbrook, Maine</b>	)	<b>Air Emission License</b>
<b>A-167-71-K-M</b>	)	<b>Amendment #1</b>

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

## **I. REGISTRATION**

### **A. Introduction**

- 1 Sanmina-SCI Corporation (Sanmina) was issued air emission license A-167-71-J-R for their sheet metal fabrication facility in Westbrook, Maine on November 6, 2002.
- 2 Sanmina has requested a minor revision to their license to include the addition of a third fuel burning stage to the facility's Iron Phosphate Washer.

### **B. Emission Equipment**

1. The following chart represents the revised Fuel Burning Equipment list for Sanmina's Air Emission License A-167-71-J-R:

<b><u>Equipment</u></b>	<b><u>Maximum Capacity (MMBtu/hr)</u></b>	<b><u>Fuel Type</u></b>	<b><u>Maximum Firing Rate (ft<sup>3</sup>/hr)</u></b>	<b><u>Post Combustion Ctrl Equipment</u></b>	<b><u>Stack</u></b>
Boiler 1	6.0	nat. gas	6,000	none	8
Make up air Unit 1	5.0	nat. gas	5,000	none	none
Make up air Unit 2	5.0	nat. gas	5,000	none	none
Washer Stage 1	2.4	nat. gas	2,400	none	14
Washer Stage 3	3.3	nat. gas	3,300	none	5
Washer Stage 5	3.3	nat. gas	3,300	none	6
Paint Finish Bake Oven	2.4	nat. gas	2,400	none	1
Pre-texture Oven	2.0	nat. gas	2,000	none	2
Burn Off Incinerator*	0.35	nat. gas	350	afterburner	7
Silk Screen Oven*	0.35	nat. gas	350	none	13
Sludge Dryer*	0.2	nat. gas	200	Cyclone & Venturi scrubber	12

\* insignificant activities noted for inventory purposes only.

2. The following chart represents the revised Process Equipment list for Sanmina's Air Emission License A-167-71-J-R:

<u>Equipment</u>	<u>Pollutant Emitted</u>	<u>Pollution Control Equipment</u>	<u>Stack #</u>
Off-line Paint Booth	PM, VOC	paper & fabric filters	4
Washer Stage 1 (Alkaline Cleaner)	Alkaline Cleaner	none	14
Washer Stage 3 (Phosphoric Acid)	Phosphoric Acid	none	5
Washer Stage 5 (Non-Chromic Sealer)	Non-Chromic Sealer	none	6
Paint Spray Booths (4)	PM, VOC	paper & fabric filter	9
Aluminum Chromate Line	see BPT section	none	10
Zinc Plating Line	Acids, Alkali	Packed Bed Scrubber	11

### C. Application Classification

A modification at a facility with a licensed emissions increase of under (4) four TPY for any one regulated pollutant and under (8) eight TPY for total pollutants is determined to be a minor revision and not a major or minor modification. This amendment is determined to be a minor revision and has been processed as such.

## II. BEST PRACTICAL TREATMENT (BPT)

### A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Bureau of Air Quality regulations. BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

### B. Amendment Description

Sanmina processes flat sheets of metal and raw material to produce metal parts that are later assembled to make computer chassis and cabinets with steel frames. Once the parts are shaped to form the desired pieces, they are plated, washed and painted and in some cases silk-screened.

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A typical pretreatment process in a conveyORIZED paint line is either an Iron or a Zinc Phosphate Washer, which consists of 3 stages minimum up to 7 stages maximum for the type of business Sanmina supports. Sanmina is currently licensed for the use of a 3-Stage Iron Phosphate Washer. To remain competitive and gain new accounts, Sanmina plans to upgrade their 3-stage washer to a 5-stage washer by adding 2 additional stages to the beginning of the pretreatment washer. The existing 3 stages will stay in place and remain the same from a fuel burning standpoint, only the stage numbers will be changed. The current stages 1 through 3 will become stages 3 through 5. The new stage 1 will utilize an alkaline cleaner requiring heat, which will be supplied through firing natural gas. The Stage 1 Heater has a maximum design heat input capacity of 2.4 MMBtu/hr. The new stage 2 is a rinse stage.

BACT for the new stage 1 heater is as follows:

1. BACT is the firing of natural gas
2. BACT for PM/PM<sub>10</sub> limits is 0.05 lb/MMBtu for firing natural gas.
3. BACT SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC emissions rates are based on AP-42 data dated 10/98 for natural gas fired boilers smaller than 100 MMBtu/hr.
4. Visible emissions from the vents serving the natural gas fired stages of the washer shall not exceed 10% opacity on a 6-minute block average basis.

Sanmina has not proposed and does not expect that an increase in their licensed annual natural gas usage limit will be necessary, therefore there is no increase in the facility's total potential annual emissions from those given in the facility's current air emission license (A-167-71-J-R).

### **III.AMBIENT AIR QUALITY ANALYSIS**

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a minor source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source. Based on the total facility emissions, Sanmina-SCI Corporation is below the emissions level required for modeling and monitoring.

### **ORDER**

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

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The Department hereby grants Air Emission License Minor Revision A-167-71-K-M, subject to the conditions found in Air Emission License A-167-71-J-R and in addition to the following conditions:

**The following shall replace paragraphs (C) and (F) of condition (18) in Air Emission License amendment A-167-71-J-R:**

- (18) C. Emissions from natural gas combustion in washer stages 1, 3 and 5 shall not exceed the following:

Equipment		PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Washer Stage 1	lb/hr	0.12	0.12	0.001	0.2	0.2	0.01
	lb/MMBtu	0.05	-	-	-	-	-
Washer Stage 3	lb/hr	0.06	0.06	0.01	0.12	0.09	0.01
	lb/MMBtu	0.05	-	-	-	-	-
Washer Stage 5	lb/hr	0.06	0.06	0.01	0.12	0.09	0.01

[MEDEP Chapter 115, BPT]

- F. Visible emissions from each of the vents serving Boiler 1, Make-up Air Unit 1 & Unit 2, Washer Stage 1, 3 and 5, Paint Finish Bake Oven and the Pre-texture Oven shall not exceed an opacity of 10% on a 6-minute block average basis, except for no more than one 6-minute block average in a 3-hour period. [MEDEP Chapter 115, BPT]

**The following is a new condition to Air Emissions License A-167-71-J-R**

- (27) This amendment shall expire concurrently with Air Emission License A-167-71-J-R.

DONE AND DATED IN AUGUSTA, MAINE THIS                      DAY OF                      2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: **August 27, 2003**

Date of application acceptance: **August 29, 2003**

Date filed with the Board of Environmental Protection: \_\_\_\_\_

This Order prepared by, Peter G. Carleton, Bureau of Air Quality